

DETAILED ACTION

Response to Amendment

1. Claim 1, 9-10, 18-19, 25 have been cancelled. Claims 2-8, 11-17, 20-24, 26-27 are pending.

Response to Arguments

2. Applicant's arguments filed 5 July 2008 have been fully considered but they are not persuasive.

3. *§ 103 Rejection*

4. **In regards to claims 6, 12**, Applicant argues that "*element 3 of Figure 1 of the Hudler patent is not a 'position detector' as alleged. Rather, element 3 is clearly a 'light source' which illuminates a stamp 2 on an envelope (Remarks 3-4).*" This is not persuasive.

5. Hudler teaches of a "*position detector.*" However, to be more aligned with the original claim language; Hudler is used to teach of the second light source where "*the light emitted from the second light source... is used in the act of determining position information (claim 6, lines 20-25).*" The specifications do not shine light upon this description. Using the broadest reasonably interpretation of the claim language, Hudler teaches of a second light source (Fig. 1, item 3) since the second light source illuminates the objects and hence indirectly is used in the act of determining position information (column 3, lines 6-7; column 1, lines 60-5). Hence, Hudler continues to read upon the claim language as currently stated.

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6. **In regards to claims 6, 12**, Applicant argues that “*it would not have been obvious to [combine the references because]... the system in the Hudler patent is used for a fundamentally different purpose than the devices in the Montgomery and Knee patents (Remarks 4-5).*” This is not persuasive.

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although Hudler teaches of an apparatus to detect stamps while Montgomery and Knee teaches of a mouse; the references are linked through the teaching of utilizing two different light sources.

8. In particular, Knee teaches of two different light sources which are used to capture an image. Montgomery teaches of a two different light sources where one light source captures an image while the other light source determines position information. Hudler teaches of a device that also uses two different light sources, where one light source captures an image while the other light source determines position information. Hudler further teaches of the benefits of having the light source which captures images having a larger angle of incidence with the surface than the other light source which determines position information.

9. Hence, although the device of Hudler may have a different function; Hudler teaches of the concept of having the light source which captures images having a larger angle of incidence

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with the surface than the other light source which determines position information. It would have been obvious to incorporate this concept of Hudler with devices of Knee and Montgomery in order to allow the image capturer to have an optimum image of the captured image (Hudler, column 3, lines 15-18). So although the functions of the references may be different, the references all share the same objectives of maximizing the image capturer and the solution of placing the different light sources at certain angles.

10. **In regards to claims 6, 12,** Applicant argues that *“the light source 3 and the scanning device 4 depend on a direction of travel of an envelope and function to illuminate a perforated edge of a stamp. These factors are clearly not relevant to the system of the Knee and Montgomery patents (Remarks 5-6).”* This is not persuasive.

11. In response to applicant's argument that Hudler and Knee with Montgomery are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, as mentioned above, the references all share the same objectives of maximizing the image capturer and the solution of placing the different light sources at certain angles.

Claim Rejections - 35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-6, 8, 11-17, 20-24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over KNEE et al. (US Patent No: 5,994,710) in view of Montgomery et al. (US Patent No: 4,797,544) and Hudler (U.S. Patent No.: 4,281,243).

13. **As for independent claims 6, 12**, KNEE teaches of a method comprising:

14. capturing a plurality of image parts (column 3, lines 37-38);

15. determining position information corresponding to each of the plurality of image parts;
and

16. generating image information using, at least, the plurality of image parts and the corresponding position information (column 12, lines 49-53);

17. wherein the act of capturing a plurality of image parts includes focusing light (Fig. 1, item 2) reflected from a surface (Fig. 1, item 5) onto an image pickup device (Fig. 1, item 10, column 6, lines 18-20);

18. wherein the act of determining position information includes accepting, by the image pickup device (Fig. 1, item 10), light reflected from the surface (Fig. 1, item 5),

19. wherein the light reflected from the surface (Fig. 1, item 5) is emitted from a first light source (Fig. 1, item 2, column 6, lines 30-33);

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20. wherein the light source emit light that illuminates a surface (Fig. 1); and
21. wherein the light emitted from the first light source (Fig. 1, item 2) and reflected from the surface (Fig. 1, item 5) onto the image pickup device (Fig. 1, item 10) is used in the act of capturing a plurality of image parts (column 6, lines 10-15) and determining position information (column 6, lines 30-33).
22. KNEE fails to teach of a second light source, and that the second light determines position information (while the first light source captures a plurality of image parts),
23. wherein the second light source emit light that illuminates a surface; and
24. wherein the first light source (image capturer) has a larger angle of incidence with the surface than the second light source (position detector).
25. Montgomery teaches of a second light source (Fig. 6, item 151) that determines position information;
26. wherein the second light source emit light that illuminates a surface (column 5, lines 38-31).
27. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a second light source of Montgomery which emits light that illuminates a surface and also determines position information, with the capturing device of KNEE in order to

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have each light source provide a unique purpose in the overall scheme of the mouse. The advantage of having each light source provide a different purpose or function to the mouse is that this allows greater flexibility in the design of the mouse, since each light source may be adjusted accordingly in order to better carry out its unique purpose (Montgomery, column 1, lines 50-55).

28. Hudler teaches that the image capturer (Fig. 1, item 4) has a larger angle of incidence with the surface (Fig. 1, item 1) than the position detector (Fig. 1, item 3).

29. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have the position detector of Montgomery and the image capturer of Knee be arranged as Hudler, with the image capturer has a larger angle of incidence. The benefits of this arrangement is that it allows the image capturer to have an optimum image of the captured image (Hudler, column 3, lines 15-18).

30. **As for independent claims 8, 24,** in addition to the claim limitations of claim 6 as analyzed above; KNEE further teaches that the act of determining position information includes focusing light reflected from the surface (Fig. 1, item 5) onto a second image pickup device (Fig. 2c, item 30, column 11, lines 25-30).

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31. **As for claims 2, 3**, KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 2}; and change of position information (column 11, line 64) {claim 3}.

32. **As for claims 13-17**, KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 13}; change of position information (column 11, line 64) {claim 14}; orientation information {claim 15}; acceleration information {claim 16} and velocity information {claim 17} in column 1, lines 40-45.

33. **As for claims 21, 22, 23**, KNEE as modified above by Montgomery teaches that the second light source is a light emitting diode {claim 21}; infra-red light emitting diode {claim 22} tunable light source able to modulate at least one of wavelength, polarization, and amplitude {claim 23} (KNEE: column 5, lines 20-25).

34. **As for claims 26, 27**, KNEE teaches that the image parts (not shown) are captured from a paper document (Fig. 1, on item 5, column 5, lines 33) and wherein the act of generating image information using, at least, the plurality of image parts (not shown) and the corresponding position information uses the image parts (Id.) to compose a larger image (column 6, lines 53-60)

Conclusion

35. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

36. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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39. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP
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